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# What is the problem?

According to the World Health Organization, cardiovascular diseases are most likely the number one cause of death globally, taking an estimated 17.9 million lives each year. More than four out of five CVD deaths are due to heart attacks and strokes, and one third of these deaths occur prematurely in people under 70 years of age. Therefore, this is the best time to improve our knowledge and understanding of your heart health. Regular monitoring will reduce our risk of heart and circulatory disease and it is also a great start to improving our overall health.

# The environment in which device will work.

Our product is designed to integrate with the C programming environment. We are using Raspberry Pi Pico

# Minimum functionality/design assumptions. CONCEPT

* Data processing and storage collected from sensors: heart pulse (minimum)
* Oxygen saturation,
* electrocardiography [do chest bandu można próbować coś pokminić z podpinaniem elektrod, a na opasce to nie wiem co najwyżej próbować tak jak to jest robione na zasadzie zrobienia obwodu z ciała człowieka],
* accelerometer -> measuring distance traveled, measuring burnt calories during training.

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# Solutions from the market (pros, cons, cost of the device and maintenance).

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# Our idea (comparison with the competition).

Our idea is to make a low-cost either wristband, that might have worse precision than the products that already exist on the market, but it will still be within the margin of error. Our product might be less convenience in terms of the size. It will be affordable for most people due to low cost of production.

# Project description (diagram, schematics, behavioral model, simulation).

# Prototype (proof of concept).